RUNOFF COLLECTION POINT		Distance Between Collection Points	DRAINAGE AREA			Runoff Coeff.	Incr.	Intensity	STORMWATER RUNOFF		PROPOSED STORM SEWER				Proposed Storm Sewer Slope	Slope of Hydraulic Gradient Based on Pipe Size	Full Flow Capacity	Depth of Flow	Actual Flow Velocity	Q100 Flow Velocity		Velocity Head Loss	Pipe Flowline Elev.	Pipe Flowline Elev.	Top of Pipe Elev.	Top of Pipe Elev.	Hg Elev.	Hg Elev.	Full/Partial Flow
Downstream Station	Upstream Station	"L" (feet)	Drainage Area Name	Increm. "A" (acres)	Accum. "A" (acres)	"C"	"CA" (acres)	"I" (in./hr.)	Increm. "Q" (c.f.s.)	Accum. "Q" (c.f.s.)	Pipe or Box	Round Pipe Diameter "d" (in.)	Rectangular Box Width "w" (ft.)	Rectangular Box Height "h" (ft.)	"S_p" (ft/ft.)	"S" (ft/ft.)	"C" (c.f.s.)	"y" (ft.)	"V_d" (f.p.s.)	"V_c" (f.p.s.)	Head Loss Coeff. K_j	Upstream Station $\frac{V_2^2-K_jV_1^2}{2g}$ (feet)	Downstream (feet)	Upstream (feet)	Downstream (feet)	Upstream (feet)	Downstream (feet)	Upstream (feet)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	27	28	30	29	32	31	34	33	35
Storm Sewer Line E																													
12+84.97																							563.71		565.71		560.98		PARTIAL
	12+84.97	39.60	E-7	1.03	1.03	0.75	0.77	9.80	7.57	7.57	Pipe	24	-	-	0.0248	0.0011	35.63	0.58	9.09	2.41	1.25	0.11		563.71		565.71		560.87	
12+45.37																							562.72		564.72		560.83		PARTIAL
	12+45.37	5.37	45 Bend	0.00	1.03	0.75	0.77	9.80	0.00	7.57	Pipe	24	-	-	0.0248	0.0011	35.63	0.58	9.09	2.41	0.50	0.05		562.72		564.72		560.78	
12+40.00																							562.59		564.59		560.78		PARTIAL
	12+40.00	73.69	60 Wye	0.47	1.50	0.75	1.13	9.80	3.45	11.02	Pipe	24	-	-	0.0248	0.0024	35.63	0.75	10.03	3.51	0.50	0.15		562.59		564.59		560.63	
11+66.31																							560.76		562.76		560.46		PARTIAL
	11+66.31	56.31	E-6	0.16	1.66	0.75	1.25	9.80	1.18	12.20	Pipe	24	-	-	0.0248	0.0029	35.63	0.80	10.30	3.88	0.50	0.14		560.76		562.76		560.32	
11+10.00																							559.37		561.37		560.15		PARTIAL
	11+10.00	15.69	PVI	0.00	1.66	0.75	1.25	9.80	0.00	12.20	Pipe	24	-	-	0.0076	0.0029	19.72	1.13	6.62	3.88	0.50	0.12		559.37		561.37		560.04	
10+94.31																							559.25		561.25		559.99		PARTIAL
	10+94.31	31.31	45 Bend	0.00	1.66	0.75	1.25	9.80	0.00	12.20	Pipe	24	-	-	0.0076	0.0029	19.72	1.13	6.62	3.88	0.50	0.12		559.25		561.25		559.87	
10+63.00																							559.01		561.01		559.78		PARTIAL
	10+63.00	56.96	45 Bend	0.00	1.66	0.75	1.25	9.80	0.00	12.20	Pipe	24	-	-	0.0076	0.0029	19.72	1.13	6.62	3.88	0.50	0.12		559.01		561.01		559.67	
10+06.04																							558.58		560.58		559.50		PARTIAL
	10+06.04	189.90	E-5	0.39	2.05	0.75	1.54	9.80	2.87	15.07	Pipe	24	-	-	0.0076	0.0044	19.72	1.28	6.98	4.80	0.50	0.24		558.58		560.58		559.26	
8+16.14																							557.13		559.13		558.42		PARTIAL
	8+16.14	76.14	E-4	0.62	2.67	0.75	2.00	9.80	4.56	19.63	Pipe	24	-	-	0.0076	0.0075	19.72	1.48	7.46	6.25	0.50	0.43		557.13		559.13		557.99	
7+40.00																							556.55		558.55		557.42		PARTIAL
	7+40.00	165.00	PVI	0.00	2.67	0.75	2.00	9.80	0.00	19.63	Pipe	24	-	-	0.0158	0.0075	28.44	1.21	9.81	6.25	0.60	0.24		556.55		558.55		557.17	
5+75.00																							553.95		556.45		555.93		PARTIAL
	5+75.00	90.39	E-3	2.51	5.18	0.75	3.89	9.80	18.45	38.08	Pipe	30	-	-	0.0158	0.0086	51.56	1.75	11.23	7.76	0.50	0.63		553.45		555.95		555.30	
4+84.61																							552.02		554.52		554.52		PARTIAL
	4+84.61	11.08	E-2	0.49	5.67	0.75	4.25	9.80	3.60	41.68	Pipe	30	-	-	0.0158	0.0103	51.56	1.84	11.50	8.49	0.30	0.84		552.02		554.52		553.68	
4+73.53																							551.84		554.34		553.57		PARTIAL
	4+73.53	25.69	45 Bend	0.00	5.67	0.75	4.25	9.80	0.00	41.68	Pipe	30	-	-	0.0158	0.0103	51.56	1.84	11.50	8.49	0.50	0.56		551.84		554.34		553.01	
4+47.84																							551.44		553.94		552.74		PARTIAL
	4+47.84	71.41	45 Bend	0.00	5.67	0.75	4.25	9.80	0.00	41.68	Pipe	30	-	-	0.0158	0.0103	51.56	1.84	11.50	8.49	0.50	0.56		551.44		553.94		552.18	
3+76.43																							550.31		552.81		551.44		PARTIAL
	3+76.43	11.32	45 Bend	0.00	5.67	0.75	4.25	9.80	0.00	41.68	Pipe	30	-	-	0.0158	0.0103	51.56	1.84	11.50	8.49	0.50	0.56		550.31		552.81		550.88	
3+65.11																							550.13		552.63		550.77		PARTIAL
	3+65.11	14.75	45 Bend	0.00	5.67	0.75	4.25	9.80	0.00	41.68	Pipe	30	-	-	0.0158	0.0103	51.56	1.84	11.50	8.49	0.50	0.56		550.13		552.63		550.21	
3+50.36																							549.90		552.90		550.06		PARTIAL
	3+50.36	8.00	F	1.33	7.00	0.75	5.25	9.80	9.78	51.46	Pipe	36	-	-	0.0158	0.0060	83.84	2.07	11.83	7.28	0.30	0.49		549.40		552.40		549.57	
3+42.36																							549.27		552.27		549.52		PARTIAL
	3+42.36	52.36	E-1	1.16	8.16	0.75	6.12	9.80	8.53	59.99	Pipe	36	-	-	0.0161	0.0081	84.63	2.22	12.41	8.49	0.30	0.87		547.77		550.77		548.65	
2+90.00																							546.93		549.93		548.23		PARTIAL
	2+90.00	50.00	MH	0.00	8.16	0.75	6.12	9.80	0.00	59.99	Pipe	36	-	-	0.0161	0.0081	84.63	2.22	12.41	8.49	0.30	0.78		545.43		548.43		547.44	
2+40.00																							544.62		547.62		547.04		PARTIAL
	2+40.00	140.00	MH	0.00	8.16	0.75	6.12	9.80	0.00	59.99	Pipe	36	-	-	0.0220	0.0081	98.93	2.05	13.92	8.49	0.25	0.84		543.12		546.12		546.20	
1+00.00																							540.04		543.04		545.07		FULL
Storm Sewer Lateral E-1																													
1+19.57																							546.77		548.27		548.95		FULL
	1+19.57	6.55	E-1	1.16	1.16	0.75	0.87	9.80	8.53	8.53	Pipe	18	-	-	0.1480	0.0066	40.41	0.39	3.71	4.82	1.00	0.36		546.77		548.27		548.59	
1+13.02																							545.80		547.30		548.55		FULL
	1+13.02	13.02	45 Bend	0.00	1.16	0.75	0.87	9.80	0.00	8.53	Pipe	18	-	-	0.1480	0.0066	40.41	0.39	3.71	4.82	0.35	0.23		545.80		547.30		548.31	
1+00.00																							543.87		543.87		548.23		FULL
Storm Sewer Lateral E-2																													
1+13.86																							553.86		555.36		554.62		PARTIAL
	1+13.86	13.86	E-2	0.49	0.49	0.75	0.37	9.80	3.60	3.60	Pipe	18	-	-	0.0970	0.0012	32.72	0.35	15.00	2.04	1.25	0.08		553.86		555.36		554.54	
1+00.00																							552.52		554.02		554.52		PARTIAL
Storm Sewer Lateral E-3																													
2+30.00																							554.36		556.86		556.47		PARTIAL
	2+30.00	130.00	E-3	2.51	2.51	0.75	1.88	9.80	18.45	18.45	Pipe	30	-	-	0.0070	0.0020	34.32	1.46	7.12	3.76	1.25	0.27		554.36		556.86		556.19	
1+00.00																							553.45		555.95		555.93		PARTIAL
Storm Sewer Lateral E-4																													
1+13.86																							559.82		561.32		558.57		PARTIAL
	1+13.86	13.86	E-4	0.62	0.62	0.75	0.47	9.80	4.56	4.56	Pipe	18	-	-	0.1755	0.0019	44.01	0.01	16.40	2.58	1.25	0.13		559.82		561.32		558.44	
1+00.00																							557.38		558.88		558.42		PARTIAL
Storm Sewer Lateral E-5																													
1+13.86																							564.38		565.88		559.56		PARTIAL
	1+13.86	13.86	E-5	0.39	0.39	0.75	0.29	9.80	2.87	2.87	Pipe	18	-	-	0.4010	0.0007	66.52	0.01	16.40	1.62	1.25	0.05		564.38		565.88		559.51	
1+00.00																							558.83		560.33		559.50		PARTIAL
Storm Sewer Lateral E-6																													
1+13.86																							564.85		566.35		560.47		PARTIAL
	1+13.86	13.86	E-6	0.16	0.16	0.75	0.12	9.80	1.18	1.18	Pipe	18	-	-	0.2770	0.0001	55.29	0.01	15.00	0.67	1.25	0.01		564.85		566.35		560.46	
1+00.00																							561.01		562.51		560.46		PARTIAL
Storm Sewer Lateral E-7																													
1+48.00																							566.00		567.50		560.90		PARTIAL
	1+48.00	48.00	E-7	0.47	0.47	0.75	0.35	9.80	3.45	3.45	Pipe	18	-	-	0.0658	0.0011	26.95	0.01	15.00	1.95	1.25	0.07		566.00		567.50		560.83	
1+00.00																							562.84		564.34		560.78		PARTIAL
Storm Sewer Line F																													
3+36.11																							556.00		557.50		553.76		PARTIAL
	3+36.11	16.97	F	1.33	1.33	0.75	1.00	9.80	9.78	9.78	Pipe	18	-	-	0.0248	0.0087	16.54	0.68	10.25	5.53	1.00	0.48		556.00		557.50		553.29	
3+19.14																							555.58		557.08		553.14		PARTIAL
	3+19.14	186.96	45 Bend	0.00	1.33	0.75	1.00	9.80	0.00	9.78	Pipe	18	-	-	0.0248	0.0087	16.54	0.68	10.25	5.53	0.50	0.24		555.58		557.08		552.90	
1+32.18																							550.95		552.45		551.28		PARTIAL
	1+32.18	32.18	45 Bend	0.00	1.33	0.75	1.00	9.80	0.00	9.78	Pipe	18	-	-	0.0248	0.0087	16.54	0.68	10.25	5.53	0.50	0.24		550.95		552.45		551.05	
1+00.00																							550.15		550.15		550.77		PARTIAL

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REV.	DATE	REMARKS	BY

STORM SEWER CALCULATIONS

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